



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Andrew Karellas, Srinivasan Vedantham and
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Application No.: 09/990,880 Filed Date: November 21, 2001

Confirmation No. 2218 Group: 2882 Examiner: Thomas D. Courtney

For: System and Method for X-Ray Fluoroscopic Imaging

CERTIFICATE OF MAILING	
I Hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450	
on <u>April 30, 2004</u>	<u>Sharlet Ramsland</u>
Date	Signature
<u>Sharlet Ramsland</u>	
Typed or printed name of person signing certificate	

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or
(First/Second submission after Final Rejection)
- ☐ under 37 CFR 1.97(b), or
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
☐ a Statement under 37 CFR 1.97(e), as checked below, or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(More than 3 months after receipt of the International Search Report, but before final action or notice of allowance, whichever occurs first)
- ☒ under 37 CFR 1.97(d) together with:
☐ a Statement under 37 CFR 1.97(e), as checked below, and
☒ a \$180.00 fee under 37 CFR 1.17(p), or
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Enclosed herewith is form PTO-1449:

- ☒ Copies of the cited references are enclosed.
- ☐ In accordance with 37 C.F.R. § 1.98 (d), copies of cited references (*list reference not enclosed*) are not enclosed as these references were entered in earlier application, U.S. Application No. [], to which the present application claims priority under 35 U.S.C. 120. The earlier application contains copies of the cited references.
- ☐ If copies of references [*list references not enclosed*] would benefit the Examiner of this case, the Examiner is invited to call the undersigned attorney and copies will be forwarded immediately.
- ☐ Listed references [] were cited in the enclosed International Search Report in a counterpart foreign application.

Concise Explanation Requirement (non-English references):

- ☐ The "concise explanation" requirement (non-English references) for reference(s) [] under 37 CFR 1.98(a)(3) is satisfied by:
 - ☐ the explanation provided on the attached sheet.
 - ☐ the explanation provided in the Specification.
 - ☐ submission of the enclosed International Search Report.
 - ☐ the enclosed English language abstract.

☐ Applicant requests that the following pending applications be considered:

Examiner's
Initials

____ U.S. Patent Application No. [], Publication No. [], Publication Date [],
by [inventor(s)], filed [], Docket No.: []

____ U.S. Patent Application No. [], Publication No. [], Publication Date [],
by [inventor(s)], filed [], Docket No.: []

____ U.S. Patent Application No. [], Publication No. [], Publication Date [],
by [inventor(s)], filed [], Docket No.: []

Examiner

Date

☐ A copy of each above-cited application, including the current claims, is enclosed.

☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

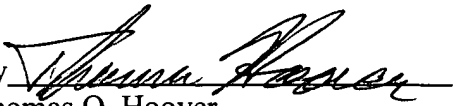
☒ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.

☐ Please charge Deposit Account No. 50-1935 in the amount of \$[]. A copy of this Statement is enclosed.

☒ Please charge any deficiency in fees and credit any overpayment to Deposit Account No. 50-1935.

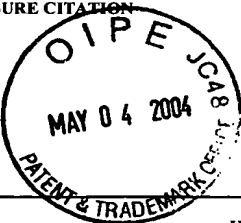
Respectfully submitted,

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PTO-1449 REPRODUCED		ATTORNEY DOCKET NO. 301506.3001-100		APPLICATION NO. 09/990,880	
SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION		APPLICANT Andrew Karellas <i>et al.</i>			
4/30/2004 (Use several sheets if necessary)		FILING DATE November 21, 2001		GROUP ART UNIT 2882	
U.S. PATENT DOCUMENTS					
EXAM- -INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	FILING DATE IF APPROPRIATE
AF4					
FOREIGN PATENT DOCUMENTS					
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	TRANSLATION YES NO
AQ					
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
AZ	Holl, I et al, "A Measurement of Light Yield of Common Inorganic Scintillator,s" IEEE Transactions on Nuclear Science 35(1), 105-109 (1988)				
AR2	Rowlands, J. A. and Taylor, K. W., "Absorption and noise in cesium iodide x-ray image intensifiers," Med. Phys. 10(6), 786-795, (1983)				
AS2	Dance D. R. and Day G. J., "Escape probabilities for fluorescent x-rays," Phys. Med. Biol. 30(3), 259-262 (1985)				
AT2	Lubinsky, A. R. et al, "Storage phosphor system for computed radiography: screen optics," Proc. SPIE 626, 120-132, (1986)				
AU2	Hejazi S. and Trauernicht, D. P., "System considerations in CCD-based x-ray imaging for digital chest radiography and digital mammography," Med. Phys. 24(2), 287-297 (1997)				
AV2	Janesick, J. R., et al, "Scientific charge-coupled devices," Optical Engineering 26(8), 692-715 (1987)				
AW2	Yaffe, M. J. and Rowlands J. A., "X-ray detectors for digital radiography," Phys. Med. Biol. 42(1), 1-39 (1997)				
AX2	Cunningham, I.A. et al, "The Detective Quantum Efficiency of Fluoroscopic Systems: The Case of a Spatial-Temporal Approach (Or, Does the Ideal Observer have Infinite Patience?)," Proc. SPIE 4320, Medical Imaging 2001: Physics of Medical Imaging, 479-488 (2001)				
AY2	Rabbani, M. et al, "Detective quantum efficiency of imaging systems with amplifying and scattering mechanisms," J. Opt. Sci. Am. A 4(5), 895-901 (1987)				
AZ2	Cunningham, I.A. et al, "A spatial frequency-dependent quantum accounting diagram and detective quantum efficiency model of signal and noise propagation in cascaded imaging systems," Med. Phys. 21(3), 417-427 (1994)				
AR3	Siewerdsen, J. H. et al, "Empirical and theoretical investigation of the noise performance of indirect detection, active matrix flat-panel imagers (AMFPIs) for diagnostic radiology," Med. Phys 24(1), 71-89 (1997)				
EXAMINER			DATE CONSIDERED		

PTO-1449 REPRODUCED SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION 4/30/2004 (Use several sheets if necessary)				ATTORNEY DOCKET NO. 301506.3001-100		APPLICATION NO. 09/990,880	
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FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AS3	Siewerdsen, J. H. et al, "Signal, noise power spectrum and detective quantum efficiency of indirect-detection flat-panel imagers for diagnostic radiology," Med. Phys. 25(5), 614-628 (1998)					
	AT3	Valentine, J. D. et al, "Temperature Dependence of CsI(Tl) Gamma-ray Excited Scintillation Characteristics," Nucl. Instrum, Meth. A325, 147-157 (1993)					
	AU3	Antonuk, L. E. et al, "Strategies to improve the signal and noise performance of active matrix, flat panel imagers for diagnostic x-ray applications," Med. Phys. 27(2), 289-306 (2000)					
	AV3	Dobbins, J. T. et al, "DQE(f) of four generations of computed radiography acquisition devices," Med. Phys. 22(10), 1581-1593 (1995)					
	AW3	Vedantham, S. et al, "Solid-state fluoroscopic imager for high-resolution angiography: parallel-cascaded linear systems analysis," Med. Phys. 31(5), 1258-1268 (2004)					
EXAMINER				DATE CONSIDERED			